



# *COMMONWEALTH of VIRGINIA*

## *DEPARTMENT OF ENVIRONMENTAL QUALITY*

NORTHERN REGIONAL OFFICE

13901 Crown Court, Woodbridge, Virginia 22193

(703) 583-3800 Fax (703) 583-3821

[www.deq.virginia.gov](http://www.deq.virginia.gov)

Douglas W. Domenech  
Secretary of Natural Resources

David K. Paylor  
Director

**STATE AIR POLLUTION CONTROL BOARD  
ENFORCEMENT ACTION - ORDER BY CONSENT  
ISSUED TO  
KING GEORGE LANDFILL, INC.  
FOR  
KING GEORGE COUNTY SANITARY LANDFILL  
Registration No. 40903**

### **SECTION A: Purpose**

This is a Consent Order issued under the authority of Va. Code §§ 10.1-1309 and -1316, between the State Air Pollution Control Board and King George Landfill, Inc., regarding the King George County Sanitary Landfill, for the purpose of resolving certain violations of the Virginia Air Pollution Control Law, the applicable permit and regulations.

### **SECTION B: Definitions**

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "Board" means the State Air Pollution Control Board, a permanent citizens' board of the Commonwealth of Virginia, as described in Va. Code §§ 10.1-1184 and -1301.
2. "CFR" means the Code of Federal Regulations, as incorporated into the Regulations.
3. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia, as described in Va. Code § 10.1-1183.
4. "Director" means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1-1185.

5. "Facility" means King George County Sanitary Landfill, located at 10376 Bullock Drive, King George, Virginia that operates a municipal solid waste disposal facility with an active landfill gas collection system and electrical power generation facility.
6. "King George" means King George Landfill, Inc., a company authorized to do business in Virginia and its members, affiliates, partners, subsidiaries, and parents. King George Landfill, Inc. is a "person" within the meaning of Va. Code § 10.1-1300.
7. "Notice of Violation" or "NOV" means a type of Notice of Alleged Violation under Va. Code § 10.1-1309.
8. "NRO" means the Northern Regional Office of DEQ, located in Woodbridge, Virginia.
9. "Order" means this document, also known as a "Consent Order" or "Order by Consent," a type of Special Order under the Virginia Air Pollution Control Law.
10. "Permit" means the Minor New Source Review Permit to construct and operate a municipal solid waste disposal facility that has an active landfill gas collection system and electrical power generation facility, which was issued under the Virginia Air Pollution Control Law and the Regulations to King George Landfill, Inc. on September 18, 2009.
11. "Regulations" or "Regulations for the Control and Abatement of Air Pollution" mean 9 VAC 5 chapters 10 through 80.
12. "Va. Code" means the Code of Virginia (1950), as amended.
13. "VAC" means the Virginia Administrative Code.
14. "Virginia Air Pollution Control Law" means Chapter 13 (§ 10.1-1300 *et seq.*) of Title 10.1 of the Va. Code.

### **SECTION C: Findings of Fact and Conclusions of Law**

1. King George operates the Facility in King George County, Virginia. The Facility is the subject of the Permit which allows the operation of a regional municipal solid waste disposal facility with an active landfill gas collection and control system and four landfill gas fired combustion turbines. The combustion turbines are also subject to 40 CFR §60.4300 *et seq.*, the New Source Performance Standards (NSPS) Subpart KKKK – Standards of Performance for Stationary Combustion Turbines.
2. 40 CFR §60.4330(a)(3) - (Standards of Performance for New Stationary Sources, Subpart KKKK- Stationary Combustion Turbines) limits sulfur dioxide emissions to no more than 65 ng SO<sub>2</sub>/J (0.15 lb SO<sub>2</sub>/mmBtu) heat input for each stationary combustion turbine burning at least 50 percent biogas (e.g., landfill gas) on a calendar month basis

3. At the end of May 2010, King George Landfill reported potential exceedances of the Subpart KKKK sulfur dioxide emission limit (0.15 lbs/mmBTU) based on raw landfill gas stain tube readings of the H<sub>2</sub>S content.
4. On July 15 and 16, 2010, King George conducted performance tests on three of the turbines (TG-1, TG-2 and TG-3). The testing results were received by DEQ on August 27, 2010.
5. On July 29, 2010, King George submitted a semi-annual excess emission report identifying exceedances of the sulfur dioxide emission standard between May 17, 2010 and June 30, 2010 based on inlet concentrations of sulfur prior to the turbines.
6. On September 7, 2010, DEQ staff conducted a Partial Compliance Evaluation (PCE) of the Facility record (performance test report) for compliance with the requirements of the Virginia Air Pollution Control Law, the Permit, and the Regulations. Based on the PCE, Department staff made the following observations:
  - a. The performance test results identified the following emission values:
    - (i) TG-1 – 0.340 lb SO<sub>2</sub>/mmBtu
    - (ii) TG-2 – 0.288 lb SO<sub>2</sub>/mmBtu
    - (iii) TG-3 – 0.348 lb SO<sub>2</sub>/mmBtu
7. The Permit, Condition 18 limits sulfur dioxide (SO<sub>2</sub>) emissions to 65 ng SO<sub>2</sub>/J (0.15 lb SO<sub>2</sub>/mmBtu) heat input from the operation of each of the combustion turbines (9 VAC 5-80-850F, 9 VAC 5-80-880, 9 VAC 5-50-260, and 9 VAC 5-50-180).
8. On September 15, 2010, based on the PCE, the Department issued a Notice of Violation to King George for the violations described in paragraphs C(6) and C(7), above.
9. On November 4, 2010, Representatives of King George met with DEQ to discuss the violations cited in the NOV and provided information regarding the installation of a SulfaTreat gas pretreatment system.
10. On November 15, 2010, King George commenced operation of the SulfaTreat system after which the sulfur stain tube test results indicated the site was in compliance with the NSPS Subpart KKKK SO<sub>2</sub> emission limit.
11. On March 2, 2011, King George submitted an excess emissions report, identifying exceedances of the sulfur dioxide emission standard between July 1, 2010 and November 14, 2010.
12. 40 CFR §60.4375(a) - (Standards of Performance for New Stationary Sources, Subpart KKKK—Standards of Performance for Stationary Combustion Turbines Reporting) requires that “[f]or each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you

must submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.”

13. 40 CFR §60.7(c) - (Standards of Performance for New Stationary Sources, Subpart A—General Provisions) requires “[e]ach owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually.”
14. Based on the results of the September 7, 2010 PCE and the November 4, 2010 meeting, and the excess emission reports previously submitted, the Board concludes that King George Landfill, Inc. has violated Condition 18 of the Permit in accordance with 9 VAC 5-80-850F, 9 VAC 5-80-880, 9 VAC 5-50-260, 9 VAC 5-50-180, 40 CFR §60.7(c), 40 CFR §60.4330(a)(3) and §60.4375(a), Subpart KKKK, as described in paragraphs C(2), C(6), C(7), C(11) through C(13), above.
15. In order for King George to maintain compliance, DEQ staff and representatives of King George have agreed to the Schedule of Compliance, which is incorporated as Appendix A of this Order

#### **SECTION D: Agreement and Order**

Accordingly, by virtue of the authority granted it in Va. Code §§ 10.1-1309 and -1316, the Board orders King George Landfill, Inc., and King George Landfill, Inc. agrees to:

1. Perform the actions described in Appendix A of this Order; and
2. Pay a civil charge of \$40,000.00 within 30 days of the effective date of the Order in settlement of the violations cited in this Order.

Payment shall be made by check, certified check, money order, or cashier’s check payable to the “Treasurer of Virginia,” and delivered to:

Receipts Control  
Department of Environmental Quality  
Post Office Box 1104  
Richmond, Virginia 23218

King George Landfill, Inc. shall include its Federal Employer Identification Number (FEIN) with the civil charge payment and shall indicate that the payment is being made in accordance with the requirements of this Order for deposit into the Virginia Environmental Emergency Response Fund (VEERF).

### **SECTION E: Administrative Provisions**

1. The Board may modify, rewrite, or amend this Order with the consent of King George Landfill, Inc. for good cause shown by King George Landfill, Inc., or on its own motion pursuant to the Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, after notice and opportunity to be heard.
2. This Order addresses and resolves only those violations specifically identified in Section C of this Order. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility; or (3) taking subsequent action to enforce the Order.
3. For purposes of this Order and subsequent actions with respect to this Order only, King George Landfill, Inc. admits the jurisdictional allegations, and agrees not to contest, but does not admit, the findings of fact and conclusions of law in this Order.
4. King George Landfill, Inc. consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.
5. King George Landfill, Inc. declares it has received fair and due process under the Administrative Process Act and the Virginia Air Pollution Control Law and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to modify, rewrite, amend, or enforce this Order.
6. Failure by King George Landfill, Inc. to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
8. King George Landfill, Inc. shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence. King George Landfill, Inc. shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. King George Landfill, Inc. shall notify the DEQ Regional Director verbally within 24 hours and in writing within three business days when circumstances are anticipated to occur, are occurring, or have occurred that may

delay compliance or cause noncompliance with any requirement of the Order. Such notice shall set forth:

- a. the reasons for the delay or noncompliance;
- b. the projected duration of any such delay or noncompliance;
- c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
- d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Regional Director verbally within 24 hours and in writing within three business days, of learning of any condition above, which the King George Landfill, Inc. intends to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto, their successors in interest, designees and assigns, jointly and severally.
10. This Order shall become effective upon execution by both the Director or his designee and King George Landfill, Inc. Nevertheless, King George Landfill, Inc. agrees to be bound by any compliance date which precedes the effective date of this Order.
11. This Order shall continue in effect until:
  - a. King George Landfill, Inc. petitions the Director or his designee to terminate the Order after it has completed all of the requirements of the Order and the Director or his designee approves the termination of the Order; or
  - b. the Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to King George Landfill, Inc..

Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve King George Landfill, Inc. from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

12. Any plans, reports, schedules or specifications attached hereto or submitted by King George Landfill, Inc. and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.
13. The undersigned representative of King George Landfill, Inc. certifies that he or she is a responsible official authorized to enter into the terms and conditions of this Order and to

execute and legally bind King George Landfill, Inc. to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of King George Landfill, Inc..

14. This Order constitutes the entire agreement and understanding of the parties concerning settlement of the violations identified in Section C of this Order, and there are no representations, warranties, covenants, terms or conditions agreed upon between the parties other than those expressed in this Order.
15. By its signature below, King George Landfill, Inc. voluntarily agrees to the issuance of this Order.

And it is so ORDERED this 18<sup>th</sup> day of April, 2011.



Thomas A. Faha, Regional Director  
Department of Environmental Quality

King George Landfill, Inc. voluntarily agrees to the issuance of this Order.

Date: 4/12/2011 By: [Signature], Director of Operations  
(Person) (Title)  
King George Landfill, Inc.

Commonwealth of Virginia

City/County of Sussex

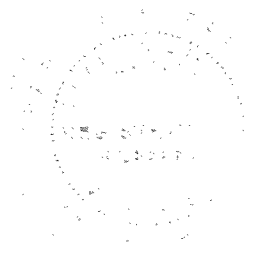
The foregoing document was signed and acknowledged before me this 12<sup>th</sup> day of April, 2011, by R. Richard Guidry who is Director of Operations of King George Landfill, Inc., on behalf of the company.

[Signature]  
Notary Public

285662  
Registration No.

My commission expires: 4-30-12

Notary seal:





## **APPENDIX A SCHEDULE OF COMPLIANCE**

### **1. Requirements**

King George Landfill, Inc. shall:

- a. As of the effective date of this order, King George shall determine the sulfur content of the treated landfill gas fuel being fired in the combustion turbines and the total sulfur content of the landfill gas routed to the open flare system on a daily basis and until such time that the landfill gas sulfur content drops below 500 ppmv, provided however that King George Landfill may submit a written request for a decrease in such sampling after six months based on a demonstrated pattern of consistent results representing a downward trend in values previously obtained. Sulfur content shall be determined using total sulfur methods described in 40 CFR §60.4415 (which may include stain tubes) or using permit-specified or agency-approved alternatives. At that time, King George shall continue the sulfur monitoring according to the schedule as provided for in the applicable air permit (9/18/09). King George shall maintain records of all monitoring results, monitoring methods and make such records available to DEQ upon request.
- b. Within 60 days from the effective date of this Order, submit estimated monthly and annual sulfur dioxide (SO<sub>2</sub>) emissions from the combined operation of the open flare system and the three (3) landfill gas fired combustion turbines for the time period January 2009 through the most current month completed at the time that this Order is effective. Annual emissions shall be calculated monthly as the sum of each consecutive twelve-month period. Estimations/assumptions of landfill gas sulfur content prior to May 2010 shall be documented and based on Virginia and US EPA regulations which allow for the use of other credible evidence including information readily available to the facility, engineering calculations, emissions estimates and direct measurements. King George shall provide additional monthly and annual calculations to DEQ on a calendar quarterly basis (within 30 days after the end of each calendar quarter) until such time that the annual SO<sub>2</sub> emissions are estimated at less than 200 tons per year.
- c. Within 60 days of the effective date of this Order, submit to DEQ details of the gas pretreatment system that will allow the gas turbines to operate in compliance with the permitted SO<sub>2</sub> emission rate of 0.15 lbs/MMBtu. Such details should include, but not limited to: the operating principle; drawings, system components; system capacity (in terms of gas flow it can handle); system monitoring (monitoring device (s), parameters, frequency, etc.); MSDS/CPDS for any chemicals used; and disposition of any chemicals recovered/generated from process. No later than 60 days from the effective date of this Order, submit a permit application for the system detailed above. The system shall be installed no later than July 1, 2011.

- d. Within 60 day of the effective date of this Order, provide DEQ with details of a methodology to be employed by King George Landfill that will prevent the upset of the gas collection and control system in the event of an interruption in grid power.
- e. Within 60 days of the completion of item (c ), one landfill gas turbine shall be stack tested to determine exhaust flow rates, concentrations (ppmd) and emission rates (lb/mmBtu, lb/hr) of sulfur dioxide using EPA Method 6C, 40 CFR Appendix A. Testing shall be conducted and reported (including data reduction) in accordance with 9 VAC 5-50-30 and approved EPA test methods and procedures. No later than 30 days prior to testing, King George shall provide DEQ a copy of the test protocol. Two (2) copies of the test results shall be submitted to DEQ's NRO within 60 days of test completion.

## **2. Certification of Documents and Reports**

In accordance with 9 VAC 5-20-230(A), in all documents or reports, including, without limitation, the SEP Completion Report, submitted to DEQ pursuant to this Consent Order, King George, shall by its officers, sign and certify under penalty of law that the information contained in such document or report is true, accurate, and not misleading by signing the following statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

## **3. DEQ Contact**

Unless otherwise specified in this Order, King George shall submit all requirements of Appendix A of this Order to:

Department of Environmental Quality  
Northern Regional Office  
Attn: Enforcement  
13901 Crown Court  
Woodbridge, VA 22193